

REMARKS

The Applicant thanks the Examiner for the telephone interview held on November 10, 2011 during which distinctions between claim limitations of the application and the cited references were discussed. Specifically, as discussed below in further detail, distinctions regarding the step of removing the envelope from the control drum by means of the scraper was discussed with reference to Foster et al. '209 (U.S. Patent No. 4,813,209). In view of the discussion with the Examiner, the Applicant is amending the claims to further clarify the noted distinctions.

Claims 49-51 and 53-69 are rejected, under 35 U.S.C. § 103, as being unpatentable over Foster et al. '209 in view of Belec et al. '015 (U.S. Patent No. 5,447,015) and Button et al. '348 (U.S. Patent No. 6,199,348) and Baumann et al. '185 (U.S. Patent No. 6,036,185). The Applicant acknowledges and respectfully traverses the raised obviousness rejection in view of the above amendments and the following remarks.

Before discussing the applied prior art in detail, the Applicant would first like to summarize the inventive aspects of the presently claimed invention. As presently claimed, the present invention relates to and covers a method for automatically inserting a small item, to be transmitted via a mailing service, into an envelope via a device. The device comprises a bin for storing envelopes and an envelope feeding mechanism for successively feeding individual envelopes from the storage bin to a control drum. The periphery of the control drum has a vacuum portion and is rotatably driven. An item feeding mechanism which sequentially moves at least one item, to be inserted, toward an envelope that is being conveyed from the storage bin toward an introduction zone by the vacuum portion of the control drum. The closing flap of the envelope being maintained in an opened position to facilitate insertion of at least one item into the envelope. An item inserting mechanism, which inserts the items into the envelopes, comprises at least one guide that is located adjacent the control drum in the introduction zone. The guide guides the item into the open envelope. At least one scraper is located adjacent to and contacting an exterior surface of the control drum. The scraper facilitates detaching the envelope from the vacuum portion of the control drum. A discharge mechanism removes the envelope from the introduction zone once the item is inserted into the envelope.

The method comprises the steps of storing the envelopes such that the closing flap of each individual envelope is in a folded closed position with the closing flap directly abutting a back surface of the envelope and adjacent the control drum; unfolding the closing flap by generating and directing a stream of air from the rotary cam at the closing flap, to open the closing flap; moving the closing flap into contact with an exterior surface of the control drum; drawing the closing flap against the exterior surface of the control drum by suction via the vacuum portion of the control drum; scraping an exterior surface of the control drum with a scraper such that, as the control drum rotates, the at least one scraper is introduced between the envelope and the exterior surface of the control drum and the envelope detaches from the control drum; further opening the envelope to facilitate insertion of the at least one item;

introducing the item into the open envelope; and discharging the envelope once the item is inserted into the envelope.

Turning now to the cited references, Foster et al. '209 discloses an apparatus for opening envelopes. Individual envelopes 13 are pulled from a stack of envelopes 13 and directed by a number of rollers and guides toward a main roller 52. As discussed by Foster et al. '209 and best seen in Figs. 4 and 5 the envelope 13 is driven through the opening process by the main roller 52 and pressure rollers 58, 60. The front face of the envelope 13 contacts and forced to follow the contour of the main roller 52 by means of an upper guide 66, which is biased toward the transfer roller 52 by a pair of springs 94, and a lower guide 68, which includes a pair of extending fingers 96 which extend into the interior of the main roller 52. As the envelope 13 is driven by the main roller 52 it contacts the fingers 96 and pivots the lower guide 68 into a position to intercept the flap 92 of the envelope 13 which causes it to become separated and bent back and away from the body of the envelope 13. Toward the end of the envelope opening process the envelope 13 emerges from the gap between the roller 52 and the guide 68 with its flap 92 bent back as it is deposited on the ledge 56.

The Examiner asserts that the envelopes are "pulled off the cam and rotating drum (52c) and redirected off the rotating drum by means of a stripper bar (96). . . and conveyed to a filling station." The Applicant asserts that Foster et al. '209 teaches that the extending fingers 96 merely force the envelope to follow the contour of the transfer rollers and facilitate pivoting of the lower guide 68 when struck by the envelope 13 (col. 4, lns. 10-15 and 34-33). As such, the extending fingers 96 help to *maintain* contact between the envelope and the transfer roller as opposed to removing the envelope from the transfer roller.

Next Belec et al. '015 relates to and teaches an apparatus for inserting enclosures into an envelope. The apparatus comprises a number of plates 24 and roller pairs 22, 23 that receive individual envelopes 6 and direct them to a vacuum drum 30 that includes a plurality of vacuum disks 32. A number of transport belts 60 encircle the vacuum drum 30 and extend along a vacuum deck 40. In use the vacuum drum 30 sucks the front face 8 of an envelope 6 to the surface thereof such that the envelope 6 lies across the belts 60. The transport belts 60 drive the envelope 6 about the surface of the drum 30 and onto the surface of the vacuum deck 40 to an envelope inserting station 10. While at the inserting station 10 the front face 8 of the envelope 6 is sucked to the vacuum deck 40 and the flap 3 is held by flap guides 25 while a vacuum cup 78 at the end of a support tube 74 is pivoted so as to contact the back surface 7 of the envelope 6. When the vacuum cup 78 engages the back surface 7 of the envelope 6, the support tube 74 is pivoted and the back surface 7 of the envelope 6 is pulled away from front surface 8 thus opening the envelope 6.

Button et al. '348 relates to and teaches an apparatus for packing of envelopes. The apparatus comprises a flap opening means 28 for blowing a continuous stream of air on a stack of envelopes in a manner such that the flap of an envelope is blown to a flap-opened position. Further, the apparatus comprises envelope packing apparatus 2 which can best be seen in Figs.

7A-7D and 8. Envelopes 4 in the flap-opened position are urged toward the packing plate 110 such that the packing plate 110 is inserted into the envelope opening 16. The packing plate 110 has a pair of spacers 122 which runs along each side of the packing plate 110. The spacers 122 enable the packing plate 110 to hold open an envelope 4 such that packing material 116 may slid along the packing plate 110 and into an awaiting envelope 4 without resistance from the envelope 4.

Finally Baumann et al. '185 relates to and teaches a device for unstacking and opening envelopes from a stack of envelopes. The device teaches a stack of envelopes 5 each having a flap that is in a closed position. The envelopes 5 are stacked such that the front face of the envelopes 5 rest upon belts 6 on top of a horizontal holder 4. In use, the envelopes 5 are extracted from the stack by the belts 6 and then they are advanced by rollers 13, 15. These rollers 13, 15 rotate and advance the envelopes 5 to communicate with rollers 17, 19. The rollers 17 and 19 are driven by a motor 21 so as to drive the envelope forward and backward to communicate with means for opening the envelope 5.

The Examiner further suggests that Baumann et al. '185 teaches a "scraper" (see "wedge-shaped deflector 31", in Fig. 6). In Figures 3 and 4, Baumann et al. '185 discloses that the "deflector 31" is arranged in a fixed manner (col. 3, lns. 52-55). This "deflector 31" is designated to direct the envelope 5 which is being driven with the aid of "drive means 17, 19" towards the "deflector 31" such that the closing flap of the envelope slides along the "deflector 31" and finally meets a moveable flap 32 (see also Figures 4-7). The closing flap of the envelope 5 is opened by bending the envelope 5 (Fig. 7) and thereby the closing flap of the envelope is folded away. This only takes place after the closing flap is not in contact anymore with the fixed "deflector 31" (see Baumann et al. '185, col. 3, lns. 52-55). Thus, the Applicant asserts that the "deflector 31" is merely a passive guiding mean for guiding the envelope being be transported and this deflector is at no time in contact with the "drive means 17, 19" but only in contact with the envelope 5. Therefore, The Applicant contends that the "deflector 31" is distinct from the scraper as recited in claim 1 of the application.

In addition, the Applicant asserts that the claims of the application are distinct from the teachings of Foster et al. '209, Belec et al. '015, Button et al. '348, and Baumann et al. '185 as these references fail to teach, disclose, suggest or even hint at the claimed steps of scraping an exterior surface of the control drum with at least one scraper such that, as the control drum rotates, the at least one scraper is introduced between the envelope and the exterior surface of the control drum and the envelope detaches from the control drum

In order to emphasize the above noted distinctions between the presently claimed invention and the applied art, the independent claims of this application now recite the features of "at least one scraper located adjacent and *contacting* an exterior surface of said control drum, for facilitating *detachment* of the envelope from the vacuum portion of the control drum . . . scraping the exterior surface of said control drum with at least one scraper such that, as the control drum rotates, the at least one scraper is introduced *between* the envelope and the

exterior surface of the control drum and the envelope detaches from the control drum". Such features are believed to clearly and patentably distinguish the presently claimed invention from all of the art of record, including the applied art.

In the event that any further amendment to any of the claims of this application is believed or deemed necessary, then the Examiner is invited to contact the undersigned representative of the Applicant in order to discuss further amendment of the above identified application.

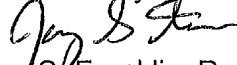
In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejections should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejections or applicability of the Foster et al '209, Belec et al '015, Button et al '348 and Baumann et al '185 references, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejection(s) should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objection(s) or requirement(s), as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,



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